

radially applying a clamping force (K) during a clamping  
10 operation to said clamping ring to reduce the diameter of said  
clamping ring and thereby tightly clamping said tubular piece on  
said connecting part;

detecting the radial clamping force developed during the  
clamping operation between said clamping ring and said tubular  
15 piece;

observing and measuring a force/displacement curve during  
said clamping operation; and,

utilizing a characteristic feature of said  
force/displacement curve as a basis for a criterion for switching  
20 off the application of said clamping force.

4. (Amended) The method of claim 1, wherein said clamping force  
is radially applied to said clamping ring with clamping jaws  
having a diameter (d) therebetween corresponding to said diameter  
of said clamping ring; said force/displacement curve is a plot of  
5 said clamping force (K) as a function of said diameter (d)  
measured along an abscissa; said force/displacement curve  
includes a segment during which a plastic deformation of said  
clamping ring takes place as said diameter (d) is reduced from a  
diameter (d2) to a diameter (d3) and, after said diameter (d3),  
10 said clamping force (K) is increased and causes a deformation  
also of said connecting part as said diameter (d) is further  
reduced beyond said diameter (d3) whereupon a maximum value of  
said clamping force (K) greater than a value  $K_{min}$  thereof is  
reached corresponding to a maximum of said curve; and, the  
15 maximum of said curve is only used for evaluation when  $K > K_{min}$

and/or  $d < d_3$  is satisfied as an additional criterion.

a<sup>2</sup> 5  
5. (Amended) The method of claim 4, wherein said maximum of said curve defines a turning point whereat the shape of said curve changes from positive slope to negative slope; and, said turning point of said force/displacement curve is used as a switchoff criterion so that said application of said clamping force is switched off after said clamping force falls off from said maximum by a predetermined increment ( $\Delta K$ ).

6. (Amended) The method of claim 1, comprising the further step of, after the clamping operation, making a determination as to whether the obtained parameter (force/displacement) lies within a defined tolerance band.

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Please add claim 8 as follows:

a<sup>3</sup>  
8. The method of claim 1, wherein said clamping force is radially applied to said clamping ring with clamping jaws having a diameter (d) therebetween corresponding to said diameter of said clamping ring; and, said force/displacement curve is a plot of said clamping force (K) as a function of said diameter (d) measured along an abscissa.

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